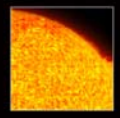
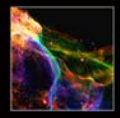
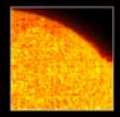



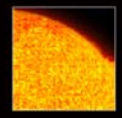
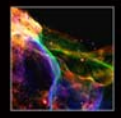
A Framework for Universal Discovery of Resources

September 22, 2003



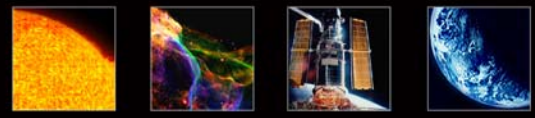

What's this all about?

- We want to be able to identify and locate, in a timely fashion, any information on Center that we have a legitimate right to know about.
- Barriers to this goal:
  - Myriad isolated repositories of information
  - Metadata stored in diverse formats, scheme
- Important considerations:
  - Intellectual property
  - Security
  - Minimize extra work

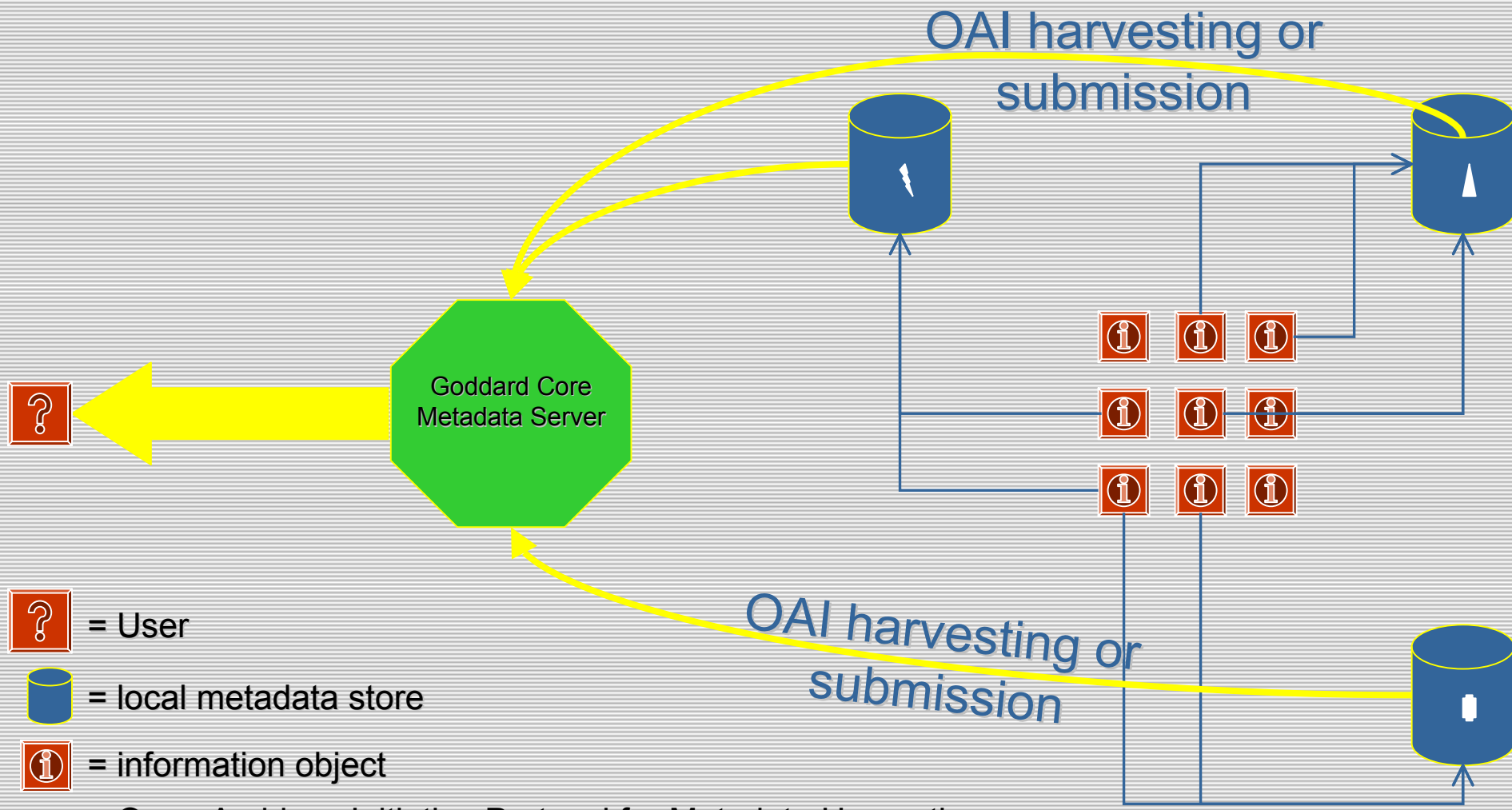



What tools can we employ to solve this problem?

- Central database to store copies of all metadata
  - alternative: on-the-fly querying
- OAI for harvesting metadata (requires complicity)
  - alternative: metadata submission
- XML as “lingua franca” data format
- Qualified Dublin Core (“Goddard Core”) as “lingua franca” metadata set
- XML registry
- Persistent identifier server/resolver
- Web Services

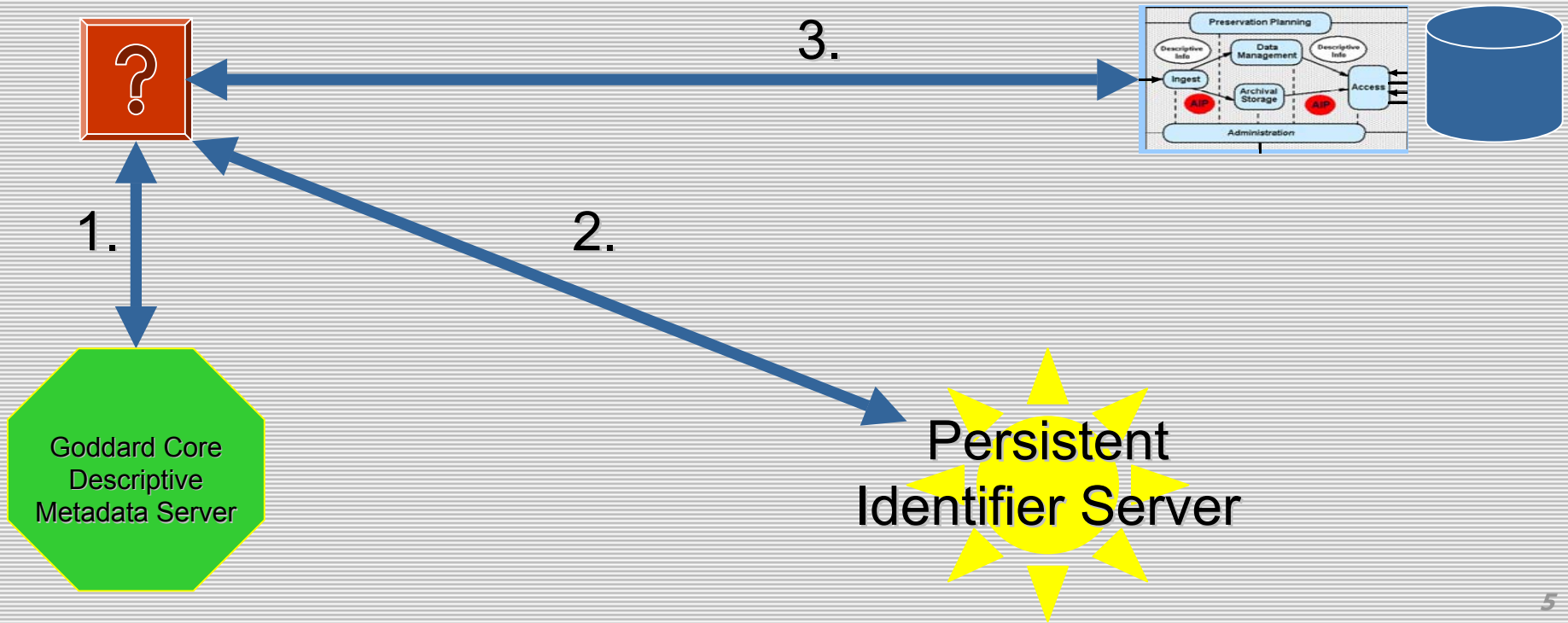


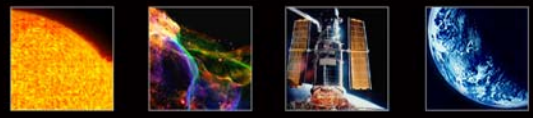
Metadata Flow



User View

1. User searches for and retrieves metadata records from GC descriptive metadata server
2. User obtains physical or virtual location of object by submitting value of DC:identifier element to Persistent Identifier Server
3. User negotiates access to object with local authority



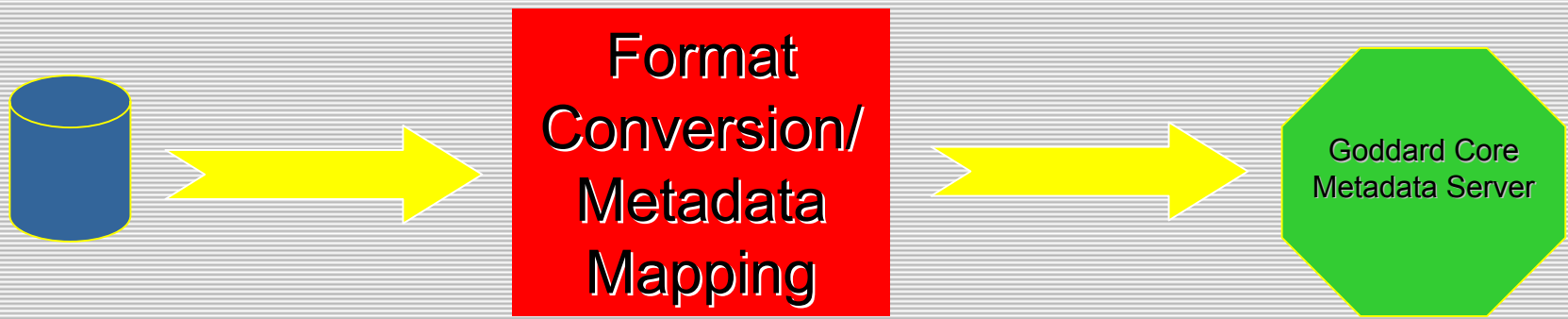


Contributing Repository View

Metadata moving from a contributing repository to the central repository must be

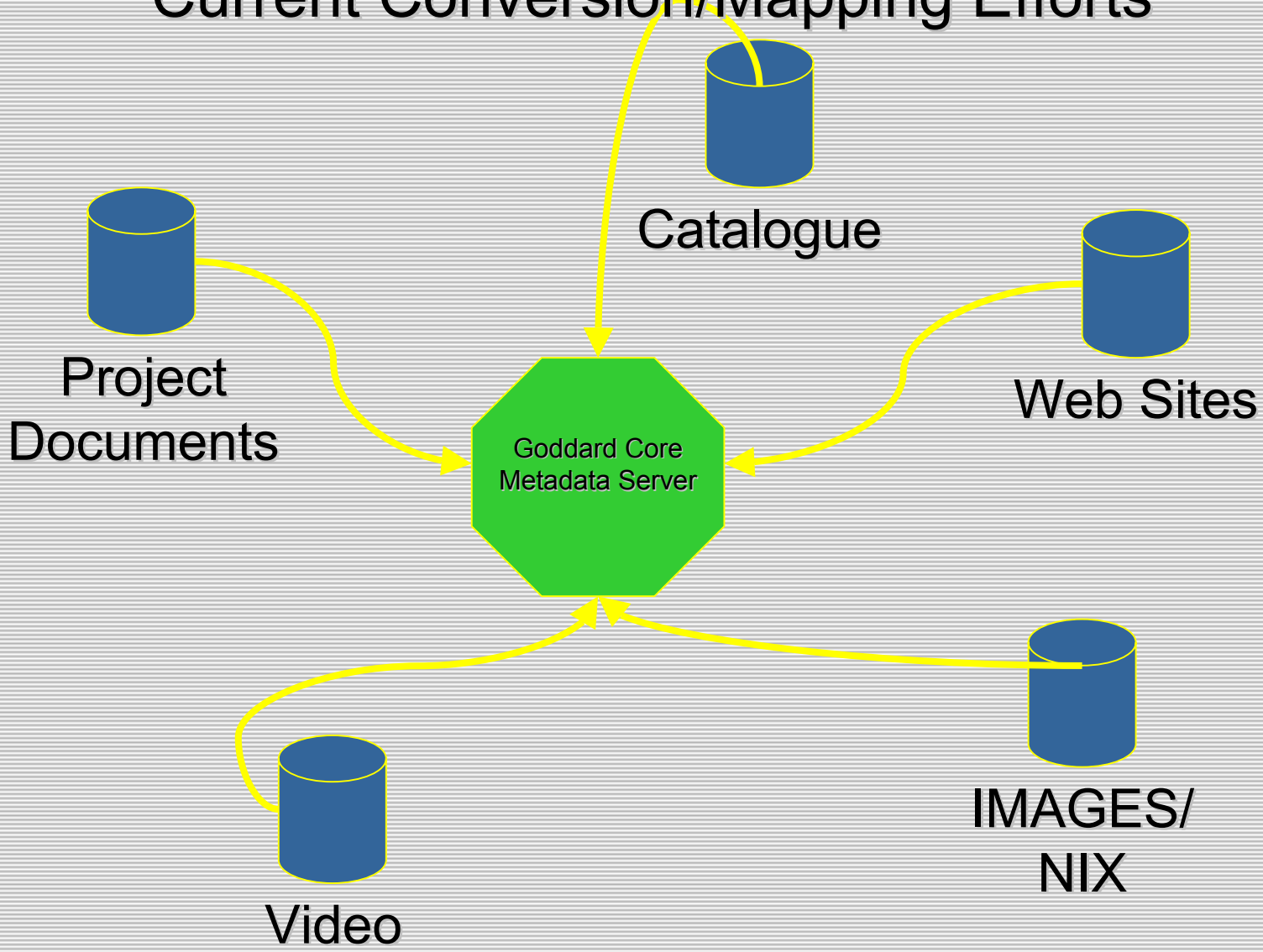
- Converted to XML
- Mapped to the Goddard Core

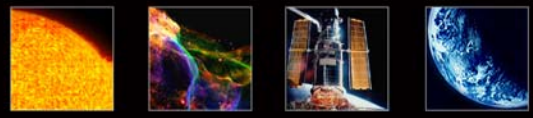
Responsibility for this function is considered case-by-case at present



= local metadata store

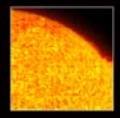
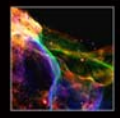
Current Conversion/Mapping Efforts





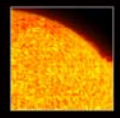
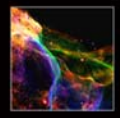
The Goddard Core

- Qualified Dublin Core
- 52 elements – 47 descriptive, 5 administrative
- uncomplicated definitions to increase flexibility
- 23 elements are refinements on subject, creator, and contributor. These refinements correspond to facets of the NASA taxonomy.
- For the most part simple elements are retained as part of the set
- Working on “best practices” for various media (e.g. WWW, videos)

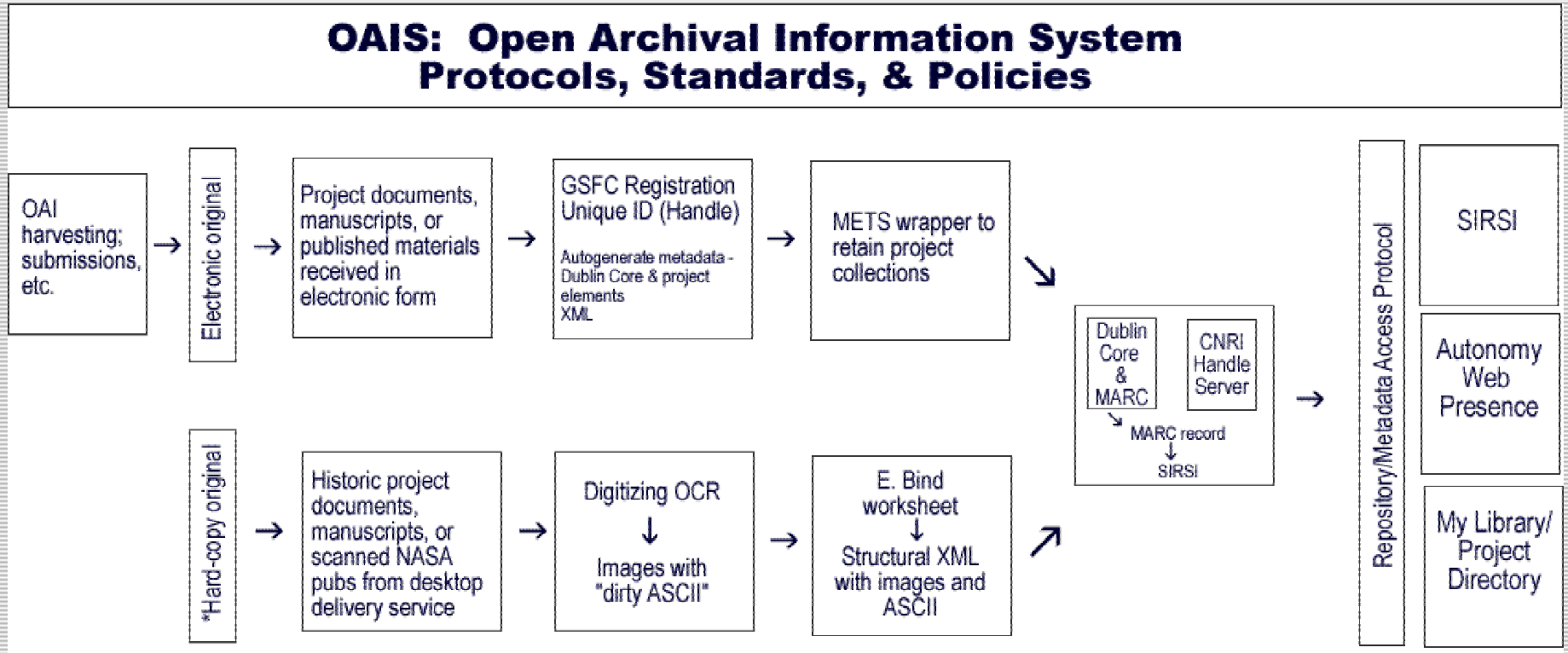



The Goddard Core: Discussion issues

- Permanance ratings: descriptive or administrative?
- Proliferation of creator, contributor, subject variants
- Persistent identification?
- Format element change

Digital Archiving Plan (December 2002)



*This is not expected to be a major focus of the prototype. However, it is important to consider the possibility of non-digital materials, both current and legacy. Digitization may be needed for unusual formats.

Figure 1. Conceptual framework